

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 10

1200 Sixth Avenue Seattle, Washington 98101

September 15, 1999

Reply To Attn Of:

OAQ-107

Via FAX

Mr. Tom Chapple Alaska Department of Environmental Conservation 410 Willoughby Avenue, Suite 105 Juneau, Alaska 99801-1795

Re: Cominco Alaska Proposed PSD Permit

Dear Mr. Chapple:

This letter is a follow-up to our recent discussions regarding the proposed prevention of significant deterioration (PSD) Permit Number 9932-AC005 for the Cominco Alaska, Inc. (Cominco) Red Dog Mine facility. I appreciate ADEC's willingness to discuss EPA's concerns. However, we have reviewed the September 3, 1999, final draft permit, and it still does not address our concerns. EPA believes the permit still does not meet the PSD requirements of the Clean Air Act. The major deficiencies are summarized below:

- 1. EPA remains concerned that the PSD analysis conducted by Cominco and accepted by ADEC is inadequate for several reasons. As outlined in my July 29, 1999, letter to you, EPA disagrees with ADEC's determination that the Best Achievable Control Technology (BACT) for Wartsila generators MG-5 and MG-17 is low NOx burners rather than selective catalytic reduction (SCR).
- 2. The September 3, 1999 draft permit does not require installation of BACT on Wartsila generators MG-1, MG-3, and MG-4, but only proposes to reinstate the annual emission cap on the total emissions from units MG-1, MG-3, and MG-4 (previously, this emissions cap applied to the total emissions from units MG-1 through MG-5). This limit is listed in the September 3, 1999 permit as:
 - (1) 2259 tons nitrogen oxides (NOx) per year from units MG-1, MG-3, and MG-4, and
 - (2) 750 ppm NOx corrected to 7% oxygen from each unit.

Note that while the 750-ppm limit applies upon issuance of the permit, the units are not required to be tested to

determine compliance with the limit until 180 days after the engines are rebuilt. This may result in emissions in excess of the 2259-tpy limit prior to rebuilding and testing of the units. Therefore, compliance with the 750-ppm NOx emission limit should be determined upon issuance of the permit. Additionally, the permit conditions allow potential emissions from each generator that are greater than the past actual emissions from each of the generators and result in a significant emission rate increase. Accordingly, it appears that the Wartsila generators MG-1, MG-3 and MG-4 may be subject to PSD, including BACT.

The ambient air boundary for the Cominco Red Dog Mine facility is not clearly and lawfully defined. Public Control Access Plan, at Section 19, page 40 of the final draft permit, indicates that the ambient air boundary is reflected in the Ambient Air Boundary Map. Because the map is not included with the permit or the Final Technical Analysis Report (TAR), it is unclear where the boundary is. Based on some large-scale maps and diagrams that have been provided, it appears that the ambient air boundary is far larger than necessary for the operation of the facility. Additionally, it does not appear that the Public Control Access Plan adequately precludes public access. Also, the warning signs to be posted at the ambient air boundaries warn only of generalized heavy industrial equipment and machinery-related hazards, but are wholly inadequate to inform the public (including off-duty Cominco employees) that the NAAQS may be exceeded beyond that point.

Finally, in part due to the ambiguity and size of the ambient air boundary, we have related concerns with the modeling for increment consumption and NAAQS compliance that was done for particulate matter (PM) and (NOx).

4. In the discussion of PM BACT for stockpiles and exposed areas (MF-7), page 62 of the TAR indicates that "the Department finds as BACT that the out of service dump areas be revegetated; the active ore body, crusher pad and roadways be watered; and the coarse ore stockpile be covered. Condition 21.7 requires the use of reasonable fugitive dust control measures." However, there does not appear to be a permit requirement for revegetation. Additionally, MF-7 is not included in the list of emission sources in the permit.

In summary, the September 3, 1999, draft PSD permit as proposed by the State of Alaska does not meet the PSD requirements of the Clean Air Act or the Alaska SIP requirements

relating to the construction or modification of new sources or the modification of existing sources.

EPA is also concerned that ADEC allowed Cominco to commence construction or modifications associated with Cominco's Production Rate Increase project at the Red Dog Mine facility prior to conducting a PSD analysis. Specifically, EPA believes that the April 2, 1996, ADEC authorization of Cominco's construction and installation of new equipment, including the new gyrator crusher, at the Red Dog Mine prior to Cominco's receipt of a PSD permit, is not in compliance with the Act or the Alaska In addition, based on a letter from ADEC to Cominco dated May 19, 1998, it appears that Cominco completed construction on the rock crusher described in its PSD permit application prior to the receipt of a PSD permit. It also appears that Cominco may have commenced construction or operation of other equipment or modifications as part of its Production Rate Increase project prior to receipt of a valid PSD permit. If so, these activities constitute a violation of Section 165(a)(1) of the Clean Air Act.

EPA urges ADEC to delay issuance of the PSD permit to Cominco and to conduct a thorough PSD analysis of all the modifications to the facility, including the diesel generators, to address the issues raised in this letter. EPA commits to work with ADEC to promptly address the technical and legal issues related to the Cominco Red Dog Mine PSD permit.

I look forward to speaking with you about these issues during the conference call scheduled for Wednesday September 15, 1999, at 2:00 PM Seattle time.

Sincerely,

Anita Frankel, Director Office of Air Quality

cc: John Notar, NPS
John Stone, ADEC